

## SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: D. Link Examiner #: \_\_\_\_\_ Date: 11-6-03  
 Art Unit: \_\_\_\_\_ Phone Number 90-605-1231 Serial Number: \_\_\_\_\_  
 Mail Box and Bldg/Room Location: 4626 B03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched.  
 Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

JP  
 priority 2000-134810 5/8/2000  
 → JP 2001-3026051 → match up  
 assignees / inventors

\*\*\*\*\*  
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Type of Search	Vendors and cost where applicable
NA Sequence (#)	STN _____
AA Sequence (#)	Dialog _____
Structure (#)	Questel/Orbit _____
Bibliographic	Dr. Link _____
Litigation	Lexis/Nexis _____
Fulltext	Sequence Systems _____
Patent Family	WWW/Internet _____
Other	Other (specify) _____

## Patent Assignment Abstract of Title

**Total Assignments: 1****Application #:** 09850053**Filing Dt:** 05/08/2001**Patent #:** NONE**Issue Dt:****PCT #:** NONE**Publication #:** NONE**Pub Dt:****Inventor:** Kazutaka Inukai**Title:** Light emitting device**Assignment: 1****Reel/Frame:** 011781/0664**Received:** 05/14/2001**Recorded:** 05/08/2001**Mailed:** 07/26/2001**Pages:** 2**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).**Assignor:** INUKAI, KAZUTAKA**Exec Dt:** 04/25/2001**Assignee:** SEMICONDUCTOR ENERGY LABORATORY CO., LTD.

398, HASE ATSUGI-SHI

KANAGAWA-KEN 243-0036, JAPAN

**Correspondent:** FISH & RICHARDSON P.C.

WILLIAM D. HARE

601 THIRTEENTH STREET, NW

WASHINGTON, DC 20005

Search Results as of: 11/6/2003 9:40:43 A.M.

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If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 703-308-9723  
Web interface last modified: Oct. 5, 2002

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-134810  
 (43)Date of publication of application : 12.05.2000

(51)Int.Cl.

Not fit

H02J 7/00  
 G01R 31/36  
 H01M 10/48

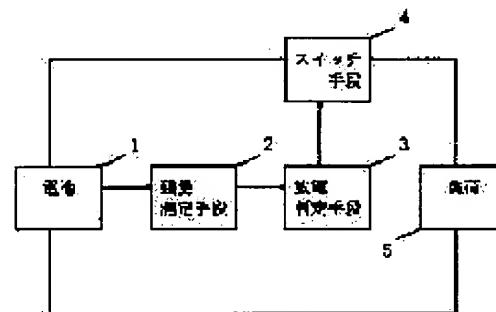
(21)Application number : 10-300548  
 (22)Date of filing : 22.10.1998

(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD  
 (72)Inventor : YOKOO SADAOKI  
 YOSHIHARA YOSHIAKI  
 SAITO NORIO

## (54) DISCHARGE MANAGEMENT DEVICE

### (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a discharge management device which can suppress deterioration of a battery and extend its cycle life time.  
 SOLUTION: While a battery 1 is discharged, a discharge deciding means 3 turns on a switching means 4 in accordance with a signal from a residual capacity measuring means 2, if the battery 1 has a sufficient residual capacity. When the discharge of the battery 1 continues and the residual capacity reaches a predetermined capacity, which is larger than a residual capacity at which the battery 1 is decided as being overdischarged, the discharge deciding means 3 decides discharge prohibition and turns off the switching means 4 to cut off a current which is applied to a load. With this constitution, a discharge management device which can suppress the deterioration of the battery and extend its cycle life time can be obtained.



## LEGAL STATUS

[Date of request for examination] 26.11.2001  
 [Date of sending the examiner's decision of rejection]  
 [Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]  
 [Date of final disposal for application]  
 [Patent number]  
 [Date of registration]  
 [Number of appeal against examiner's decision of rejection]  
 [Date of requesting appeal against examiner's decision of rejection]  
 [Date of extinction of right]

Query/Command : prt max legalall

1/1 PLUSPAT - ©QUESTEL-ORBIT - image

**PN** -  JP2002032057 A 20020131 [JP2002032057]  
**TI** - (A) LIGHT EMITTING DEVICE AND DRIVING METHOD THEREFOR  
**PA** - (A) SEMICONDUCTOR ENERGY LAB  
**PA0** - (A) SEMICONDUCTOR ENERGY LAB CO LTD  
**IN** - (A) INUKAI KAZUTAKA  
**AP** - JP2001135718 20010507 [2001JP-0135718]  
**PR** - JP2001135718 20010507 [2001JP-0135718]  
JP2000134810 20000508 [2000JP-0134810]  
**IC** - (A) G09F-009/30 G09G-003/20 G09G-003/30 H05B-033/04 H05B-033/08 H05B-033/12 H05B-033/14 H05B-033/22  
**STG** - (A) Doc. Laid open to publ. Inspec.  
**AB** - PROBLEM TO BE SOLVED: To provide an active matrix type light emitting device permitting sharp multi-gradation color display.  
SOLUTION: Each of the plural pixels included in a pixel part has an EL element, a switching use TFT, and an EL driving use TFT respectively, and the EL element has a pixel electrode, a counter electrodes, and an EL layer arranged between the pixel electrode and the counter electrodes, and time- division gradation display is performed by controlling a potential of the counter electrodes and that of the pixel electrode.  
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**UP** - 2002-10

## End of Result Set

L4: Entry 1 of 1

File: DWPI

Nov 8, 2001

DERWENT-ACC-NO: 2002-121325

DERWENT-WEEK: 200224

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TITLE: Active matrix electro luminescent display device e.g. for digital video disk player, video camera, has pixel electrode whose electric potential is controlled by digital video signal

INVENTOR: INUKAI, K

PATENT-ASSIGNEE: SEMICONDUCTOR ENERGY LAB (SEME), INUKAI K (INUKI)

PRIORITY-DATA: 2000JP-0134810 (May 8, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20010038367 A1	November 8, 2001		057	G09G003/30
JP 2002032057 A	January 31, 2002		037	G09G003/30

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US20010038367A1	May 8, 2001	2001US-0850053	
JP2002032057A	May 7, 2001	2001JP-0135718	

INT-CL (IPC): G09 F 9/30; G09 G 3/20; G09 G 3/30; H05 B 33/04; H05 B 33/08; H05 B 33/12; H05 B 33/14; H05 B 33/22

ABSTRACTED-PUB-NO: US20010038367A

## BASIC-ABSTRACT:

NOVELTY - Each of the several pixels (105) has an electro luminescent (EL) element (110) which consists of an EL layer in between pixel electrode and opposing electrode. The pixels are arranged in lines, and the opposing electrode of the EL element is connected to other opposing electrodes provided on the same line. Electric potential of the pixel electrode is controlled based on digital video signal.

USE - For personal computer, television, advertisement display, digital video disk player, video camera, digital camera, head-mount display, car navigation equipment, audio equipment, portable information terminal like portable telephone, portable game machine, electronic book, etc.

ADVANTAGE - Provides high performance active matrix EL display which allows clear multi-gray scale color display, by controlling the light emitted from EL element in terms of time.

DESCRIPTION OF DRAWING(S) - The figure shows a circuit diagram of pixel of EL display.

Pixels 105

Electro luminescence element 110

ABSTRACTED-PUB-NO: US20010038367A

## End of Result Set

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File: DWPI

Nov 8, 2001

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ABSTRACTED-PUB-NO: US20010038367A

EQUIVALENT-ABSTRACTS :

CHOSEN-DRAWING: Dwg. 3/25

DERWENT-CLASS: A89 P85 T04 U14 W03 W04 W05

CPI-CODES: A12-E11A;

EPI-CODES: T04-H03B; T04-H03C3; U14-J03; W03-A08; W04-Q01; W05-E03A5C;

EQUIVALENT-ABSTRACTS :

CHOSEN-DRAWING: Dwg. 3/25

DERWENT-CLASS: A89 P85 T04 U14 W03 W04 W05

CPI-CODES: A12-E11A;

EPI-CODES: T04-H03B; T04-H03C3; U14-J03; W03-A08; W04-Q01; W05-E03A5C;